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| APPLICATION NO.                        | FILING DATE                        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------------------------------------|----------------------|---------------------|------------------|
| 10/588,830                             | 08/09/2006                         | Paul Shalk           | DC10029 PCT1        | 4508             |
| DOW CORNIN                             | 7590 06/27/200<br>NG CORPORATION C | ·                    | EXAMINER            |                  |
| 2200 W. SALZBURG ROAD                  |                                    |                      | TAYLOR, EARL N      |                  |
| P.O. BOX 994<br>MIDLAND, MI 48686-0994 |                                    |                      | ART UNIT            | PAPER NUMBER     |
|  |                                    |                      | 2818                |                  |
|  | •                                  | •                    |                     |                  |
|  |                                    |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|  | •                                  |                      | 06/27/2007          | ELECTRONIC       |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents.admin@dowcorning.com

|   |   | Application No.   | Applicant(s)  |  |  |  |
|---|---|---|---|--|--|--|
| Office Action Summary   |   |   |   |  |  |  |
|   |   | 10/588,830  | SHALK ET AL.  |  |  |  |
| Onice   | FACTION Summary   | Examiner  | Art Unit  |  |  |  |
| The MAII  | ING DATE of this communication app  | Earl N. Taylor  | 2818  |  |  |  |
| Period for Reply  | ING DATE OF UNS COMMUNICATION APP   | ears on the cover sheet with the  | correspondence address  |  |  |  |
| WHICHEVER IS  - Extensions of time rafter SIX (6) MONTI  - If NO period for repl  - Failure to reply within Any reply received by   | STATUTORY PERIOD FOR REPLY LONGER, FROM THE MAILING DAMAY be available under the provisions of 37 CFR 1.13 HS from the mailing date of this communication. It is specified above, the maximum statutory period with the set or extended period for reply will, by statute, by the Office later than three months after the mailing adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATIO  36(a). In no event, however, may a reply be til  7ill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |
| Status  |   |   |   |  |  |  |
| 1) Responsi   | ve to communication(s) filed on <u>09 Au</u>  | <u>ugust 2006</u> .   |   |  |  |  |
| <u>/=</u>   | This action is FINAL. 2b)⊠ This action is non-final.  |   |   |  |  |  |
| ,   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |  |  |
| closed in a   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |  |  |  |
| Disposition of Clai   | ms  |   |   |  |  |  |
| 4a) Of the 5) ☐ Claim(s) _ 6) ☑ Claim(s) _ 7) ☐ Claim(s) _  | <ul> <li>1-10 is/are pending in the application.</li> <li>above claim(s) is/are withdraw</li> <li> is/are allowed.</li> <li>1-10 is/are rejected.</li> <li> is/are objected to.</li> <li> are subject to restriction and/or</li> </ul>  | vn from consideration.  |   |  |  |  |
| Application Papers  | <b>3</b>  |   |   |  |  |  |
| 10)  The drawir<br>Applicant n<br>Replaceme   | ication is objected to by the Examine<br>ng(s) filed on is/are: a) acce<br>nay not request that any objection to the o<br>ent drawing sheet(s) including the correct<br>or declaration is objected to by the Ex   | epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob   | e 37 CFR 1.85(a).<br>ojected to. See 37 CFR 1.121(d).                       |  |  |  |
| Priority under 35 U   | I.S.C. § 119  |   |   |  |  |  |
| 12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |   |   |   |  |  |  |
|   | rson's Patent Drawing Review (PTO-948) sure Statement(s) (PTO/SB/08)  | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:   | ate   |  |  |  |

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#### **DETAILED ACTION**

#### Information Disclosure Statement

This office acknowledges receipt of the following items from the applicant:

Information Disclosure Statement (IDS) filed on 9 August 2006. The references cited on the PTOL 1449 form have been considered.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Heeger et al. (International Publication WO 95/01871) as cited on applicant submitted IDS.

Referring to Claim 1, Heeger teaches, in Fig. 10 (page 18, line 33 to page 20, line 25), an organic light-emitting diode comprising: a substrate (18) having a first opposing surface and a second opposing surface; a first electrode layer (12) overlying the first opposing surface; a light-emitting element (14) overlying the first electrode layer (12), the light-emitting element (14) comprising a hole-transport layer and an emissive/electron-transport layer, wherein the hole-transport layer and the

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emissive/electron-transport layer lie directly on one another, and the hole-transport layer comprises a cured polysiloxane (page. 12, lines 23-25) and a second electrode layer (16) overlying the light-emitting element. The language, term, or phrase "polysiloxane" prepared by applying a silicone composition to form a film and curing the film, wherein the silicone composition comprises (A) a polysiloxane prepared by reacting a silane selected from at least one substituted silane having the formula R1 SiX3 and a mixture comprising the substituted silane and at least one tetrafunctional silane having the formula SiX<sub>4</sub> with water in the presence of an organic solvent, wherein R<sup>1</sup> is -Y-Cz, -(CH<sub>2</sub>)<sub>m</sub>-C<sub>n</sub>F<sub>2n+1</sub>, or -(CH<sub>2</sub>)<sub>m</sub>-C<sub>6</sub>F<sub>5</sub>, wherein Cz is N-carbazolyl, Y is a divalent organic group, m is an integer from 2 to 10, n is an integer from 1 to 3, and X is a hydrolysable group, and (B) an organic solvent", is directed towards the process of making a polysiloxane. It is well settled that "product by process" limitations in claims drawn to structure are directed to the product, per se, no matter how actually made. In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also, In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wethheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Marosi et al., 218 USPQ 289; and particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or otherwise. The above case law further makes

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clear that applicant has the burden of showing that the method language necessarily produces a structural difference.

As such, the language "polysiloxane prepared by ..." only requires polysiloxane, which does not distinguish the invention from Heeger, who teaches the structure as claimed.

Referring to Claims 2-8, Heeger teaches all of the limitations of Claim 1. The entirety of Claims 2-8 are directed to the process of making the polysiloxane. It is well settled that "product by process" limitations in claims drawn to structure are directed to the product, per se, no matter how actually made. In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also, In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wethheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Marosi et al., 218 USPQ 289; and particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or otherwise. The above case law further makes clear that applicant has the burden of showing that the method language necessarily produces a structural difference.

As such, the language "polysiloxane prepared by ..." only requires polysiloxane, which does not distinguish the invention from Heeger, who teaches the structure as claimed.

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Referring to Claim 9, Heeger teaches all of the limitations of Claim 1 wherein the emmisive/electron transport layer comprises a fluorescent dye (page. 3, Lines 21-29).

Referring to Claim 10, Heeger teaches all of the limitations of Claim 1 further comprising at least one of a hole-injection layer and an electron injection layer (page. 19, Line 7 to page. 20, Line 3).

## Telephone / Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Earl N. Taylor whose telephone number is (571) 272-8894. The examiner can normally be reached on Monday-Friday from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571) 272-1657. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Earl N. Taylor

STEVEN LOKE SUPERVISORY PATENT EXAMINER